1. (Currently Amended) A method for affecting thermoacoustic oscillations in a combustion system ~~(5) comprising~~ having at least one burner ~~(6)~~ and at least one combustor ~~(7)~~, in which a gas flow forming in the region of the burner ~~(6)~~ is excited acoustically, ~~and/or~~ in which modulated injection of fuel is carried out, or both, the method comprising:

~~characterized in that~~ coordinating the acoustic excitations of the gas flow, ~~and/or~~ the modulated injections of the fuel, or both, ~~are coordinated in order~~ to affect at least two different interference frequencies of the thermoacoustic oscillations.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:

affecting two interference frequencies ~~are affected~~ exclusively by ~~means of~~ acoustic excitation of the gas flow with different phases, ~~and/or~~ amplitudes, or both.

3. (Currently Amended) The method as claimed in claim 2, ~~characterized in that~~ comprising:

producing the acoustic excitation of the gas flow ~~is produced~~ with at least one acoustic source ~~(3)~~, ~~the production of~~ said producing including producing acoustic excitations of different phases, ~~and/or~~ amplitudes, or both, ~~being carried out either~~ via a common acoustic source or via at least two separate acoustic sources ~~(3, 3')~~.

4. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:

affecting two interference frequencies ~~are affected~~ exclusively by ~~means of~~ modulated injections of ~~the~~ fuel with different injection times, ~~and/or~~ different injection quantities, or both.

5. (Currently Amended) The method as claimed in claim 4, ~~characterized in that the~~ comprising:

producing modulated injections of the fuel ~~are produced~~ with at least one control valve ~~(4)~~, the ~~production of~~ modulated injections with different injection times, ~~and/or~~ different

injection quantities, or both, being carried out ~~either~~ via a common control valve or via at least two separate control valves ~~(4, 4')~~.

6. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ comprising:

affecting one interference frequency ~~is affected~~ by ~~means of~~ acoustic excitation of the gas flow; and

affecting another interference frequency ~~is affected~~ by ~~means of~~ modulated injection of the fuel.

7. (Currently Amended) A device for affecting thermoacoustic oscillations in a combustion system ~~(5)~~ comprising:

at least one burner ~~(6)~~ and one combustor ~~(7), in which, in the region of the burner (6) there is arranged~~;

at least one acoustic source ~~(3, 3') for producing~~ configured and arranged to produce acoustic excitation of a gas flow forming in the region of the burner ~~(6)~~, ~~and/or in which~~ the burner ~~(6) has~~ having at least one fuel supply device with at least one control valve ~~(4, 4')~~ for producing modulated injection of a fuel, ~~characterized in that~~ or both;

a control system ~~(2) is provided which drives~~ driving the at least one acoustic source, ~~(3, 3') and/or~~ the at least one control valve, ~~(4, 4')~~or both, to affect at least two different interference frequencies of the thermoacoustic oscillations.

8. (Currently Amended) The device as claimed in claim 7, ~~characterized in that~~ wherein the control system ~~(2)~~ has a control path ~~(8, 9)~~ for each interference frequency to be affected, which, on ~~the~~ an input side, has a frequency band-pass filter ~~(10, 10')~~ tuned to the respective interference frequency and, on ~~the~~ an output side, is connected to the respective acoustic source ~~(3, 3')~~ or to the respective control valve ~~(4, 4')~~, each control path ~~(8, 9)~~ containing a time delay element ~~(11, 11')~~.